# -\*- coding: utf-8- -\*-

##Tic-Tac\_Toe

import random

new = ['','','','','','','','','']

man = ''

machine = ''

null = ''

def sign(man, machine):

man = raw\_input("What team you want to be? X or O ") #code asks you what choice team do you wanna be

while man not in ('x','X','o','O'):#choices that you have to type in

print "Invalid Choice!"#if another letter it will then print the text from line 15

man = raw\_input("What team you want to be? X or O ") #asks you the question of what team you wanna be on

if man == 'x' or man == 'X':#if you wanna be X's you have to use a lower case x or capitial X

print "Ok, X is yours!"#after pressing enter to the code it will then precede to give you the x

machine = 'o'#machiner would then get O's because of you picking the X

else:

print "Ok, O is yours!" #if you type O then you will get the O's

machine = 'x'

return man.upper(), machine.upper()

def decide\_turn():

turn = None

while turn not in ('y','Y','n','N'): #choices if you want to go first or second you need to type in y,Y or n,N

turn = raw\_input("Do you want to go first? ") #after picking your team the code will procede then you will be asked if you want to go first

if turn == 'y' or turn == 'Y': #the code is written to where you can either pick lower case y or capitial

return 1

elif turn == 'n' or turn == 'N': #the code is written to where you can enter in lower case n or capitial n

return 0

else:

print "its an invalid choice." #if you dont pick neitther and type in something else it will then print its an invalid choice and make you pick something

def draw(a):

print "\n\t",a[0],"|",a[1],"|",a[2] #these are the cordinates for where you want to place your X's or O's

print "\t", "--------"

print "\n\t",a[3],"|",a[4],"|",a[5]

print "\t", "--------"

print "\n\t",a[6],"|",a[7],"|",a[8], "\n"

def congo\_man():

print "You won!!" #if you will the code will then print you won

def congo\_machine():

print "Hahha, I won!!!" #if you lose the code will then print the text hahha, i won

def man\_first(man, machine, new): #this is the order in which you guys will pick your places

while winn(man, machine, new) is None:

move = man\_move(man, new)

new[int(move)] = man

draw(new)

if winn(man, machine, new) != None:

break

else:

pass

print "ummmm....i'll take.." #after choosing where you want to go the code will print um i will take and then place there X or O where they want it

p\_move = machine\_move(man, machine, new) #this is the order of whihc you guys will go in if you pick to go second

print p\_move

new[int(p\_move)] = machine

draw(new)

q = winn(man, machine, new)

if q == 1:

congo\_man()

elif q == 0:

congo\_machine()

else:

print "Its tie man..." #If no one wins then the code will print its a tie

def machine\_first(man, machine, new): #the order in which the computor is going first

while not winn(man, machine, new):

print "i'll take..." #the code will then print this by knowing it is going first and printing the text i'll take

p\_move = machine\_move(man, machine, new) #order in which you pick your cordinates

print p\_move

new[p\_move] = machine

draw(new)

if winn(man, machine, new) != None: #the order in which your playing with

break

else:

pass

move = man\_move(man, new) #it is your move

new[int(move)] = man

draw(new)

q = winn(man, machine, new)

if q == 1:

congo\_man()#

elif q == 0:

congo\_machine()#

else:

print "Its tie man..."

def winn(man, machine, new):

ways = ((0,1,2),(3,4,5),(6,7,8),(0,3,6),(1,4,7),(2,5,8),(0,4,8),(2,4,6)) #ways to win if you get one of these sets of numbers

for i in ways:

if new[i[0]] == new[i[1]] == new[i[2]] != null: #

winner = new[i[0]]

if winner == man:

return 1

elif winner == machine:

return 0

if null not in new:

return 'TIE'

if null not in new:

return 'TIE'

return None

def man\_move(man, new):

a = raw\_input("where you want to move? ")

while True:

if a not in ('0','1','2','3','4','5','6','7','8'):

print "Sorry, invalid move"

a = raw\_input("where you want to move? ")

elif new[int(a)] != null:

print "Sorry, the place is already taken"

a = raw\_input("where you want to move? ")

else:

return int(a)

def machine\_move(man, machine, new):

best = [4, 0, 2, 6, 8]

blank = []

for i in range(0,9):

if new[i] == null:

blank.append(i)

for i in blank:

new[i] = machine

if winn(man, machine, new) is 0:

return i

new[i] = null

for i in blank:

new[i] = man

if winn(man, machine, new) is 1:

return i

new[i] = null

return int(blank[random.randrange(len(blank))])

def display\_instruction():

""" Displays Game Instuructions. """

print

"""

Welcome to the Game...

You will make your move known by entering a number, 0 - 8.

The will correspond to the board position as illustrated:

0 | 1 | 2

-----------

3 | 4 | 5

-----------

6 | 7 | 8

Prepare yourself, the ultimate bettel is about to begin.....

"""

def main(man, machine, new):#order of picking your boxes after you start another game

display\_instruction()

print "so lets begin.."#the code prints this text because of the game re running the program code for the game

a = sign(man, machine)

man = a[0]

machine = a[1]

b = decide\_turn()

if b == 1:

print "Ok, you are first!"

print "Lets get started, here's a new board!"

draw(new)

man\_first(man, machine, new)

elif b == 0:

print "Ok, I'll be the first!"

print "So, lets start.."

draw(new)

machine\_first(man, machine, new)

else:

pass

main(man, machine, new)

raw\_input("Press enter to exit")#uses code to restart everything then you rerun all the code